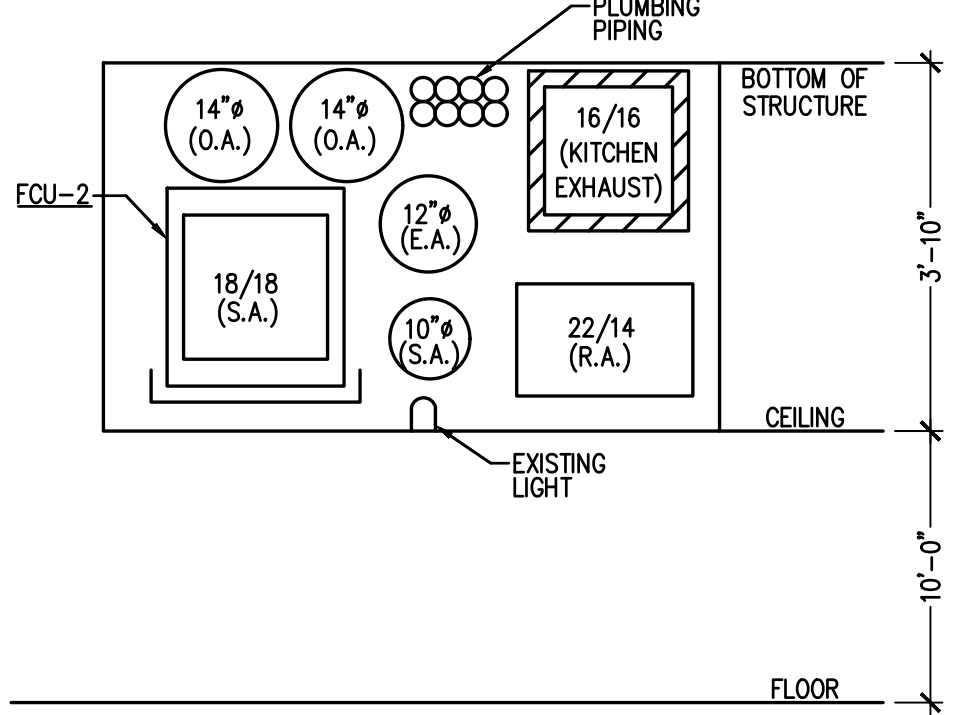


GENERAL NOTES

- ALL OUTDOOR AIR INTAKES BY MECHANICAL EQUIPMENT SHALL HAVE A MINIMUM 10'-0" HORIZONTAL CLEARANCE FROM THE DISCHARGE OF ANY EXHAUST FAN, COMBUSTION EXHAUST OR PLUMBING VENT.
- PROVIDE VIBRATION ISOLATION DEVICES AND FLEXIBLE DUCT/ PIPING CONNECTIONS TO ALL MOVING MACHINERY NOT INTERNALLY ISOLATED
- ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
- THE MECHANICAL CONTRACTOR SHALL COORDINATE ALL DUCT AND DIFFUSER LOCATIONS WITH LIGHT FIXTURES AS WELL AS SPRINKLER PIPING AND HEADS (WHERE INCLUDED IN THE PROJECT) FOR A COMPLETE INSTALLATION.
- LOCATIONS FOR THERMOSTATS AND REMOTE SENSORS SHALL BE FIELD COORDINATED TO AVOID INTERFERENCE WITH WALL-MOUNTED DECOR OR PROXIMITY TO HEAT PRODUCING EQUIPMENT.
- ALL HVAC AND RESTROOM EXHAUST DUCTWORK SHALL BE INSTALLED AS HIGH AS POSSIBLE UNDER THE ROOF STRUCTURE.
- ALL RECTANGULAR, ROUND, AND FLEXIBLE DUCTWORK SHALL BE SIZED AS SHOWN ON THESE DRAWINGS, DIMENSIONS SHOWN ARE TO BE INTERIOR CLEAR DIMENSIONS; AND SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MOST RECENTLY PUBLISHED SMACNA STANDARDS. ALL JOINTS, SEAMS, AND CONNECTIONS MUST BE SECURELY FASTENED & SEALED BY APPROVED METHODS.
- ANY FLEXIBLE DUCTS SHALL BE INSTALLED IN CONCEALED SPACES ONLY. THE MAXIMUM ALLOWABLE LENGTH OF FLEXIBLE DUCT SHALL BE 5'-0". ALL A PANDUIT-TYPE BAND, AND SHALL NOT BE ATTACHED DIRECTLY TO THE AIR DEVICE COLLAR.
- SUPPLY, RETURN, RESTROOM EXHAUST, AND MAKEUP AIR DUCT CONSTRUCTION SHALL BE GALVANIZED STEEL. GAUGES, SWAY BRACING AND SUSPENSION SHALL CONFORM TO SMACNA STANDARDS. SEAL ALL SEAMS AND JOINTS AIR AND WATER TIGHT. FLEXIBLE ALUMINUM DUCTWORK OR FIBERGLASS DUCTBOARD IS NOT ALLOWED (UNO).
- PITCH ALL HORIZONTAL GREASE AND CONDENSATE DUCTWORK UNIFORMLY BACK TOWARDS THE RESPECTIVE HOOD OR APPLIANCE AT A MINIMUM 1/4" PER FOOT (NOT TO EXCEED 50'-0").
- THE WALL MOUNTED CANOPY TYPE KITCHEN EXHAUST HOODS SHALL BE INSTALLED AT 6"-8" AFF (UNO), COORDINATE THE INSTALLATION AND PLACEMENT OF THE EXHAUST HOODS IN THE FIELD.
- REFER TO MANUFACTURER SHEETS FOR THE HOOD CONTROL WIRING DIAGRAM FOR OPERATION OF THE KITCHEN HOOD EQUIPMENT.
- THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THE AIR FILTERS AT THE ROOFTOP UNITS WITH 2" THICK PLEATED MERV 7 THROW AWAY TYPE AIR FILTERS AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO AIR BALANCE AND STORE TURNOVER.
- GENERAL CONTRACTOR SHALL ACQUIRE THE SERVICES OF A LOCAL PROFESSIONAL STRUCTURAL ENGINEER TO ANALYZE ROOF STRUCTURE FOR MOUNTING OF NEW EQUIPMENT.
- USE LANDLORD APPROVED ROOFING CONTRACTOR FOR ALL ROOF WORK.
- CONTRACTOR SHALL ACQUIRE THE SERVICES OF A LOCAL REGISTERED STRUCTURAL ENGINEER TO ANALYZE ROOF FRAMING FOR NEW ROOFTOP EQUIPMENT.

COORDINATE WITH EXISTING PLUMBING PIPING SERVING APARTMENTS AND SPRINKLER PIPING MAIN BRANCHES.

LANDLORD SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL FCU-XX/CU-XX ALONG WITH REFRIGERANT PIPING AND START-UP.



2 SOFIT SECTION CUT
1/2"=1'-0"

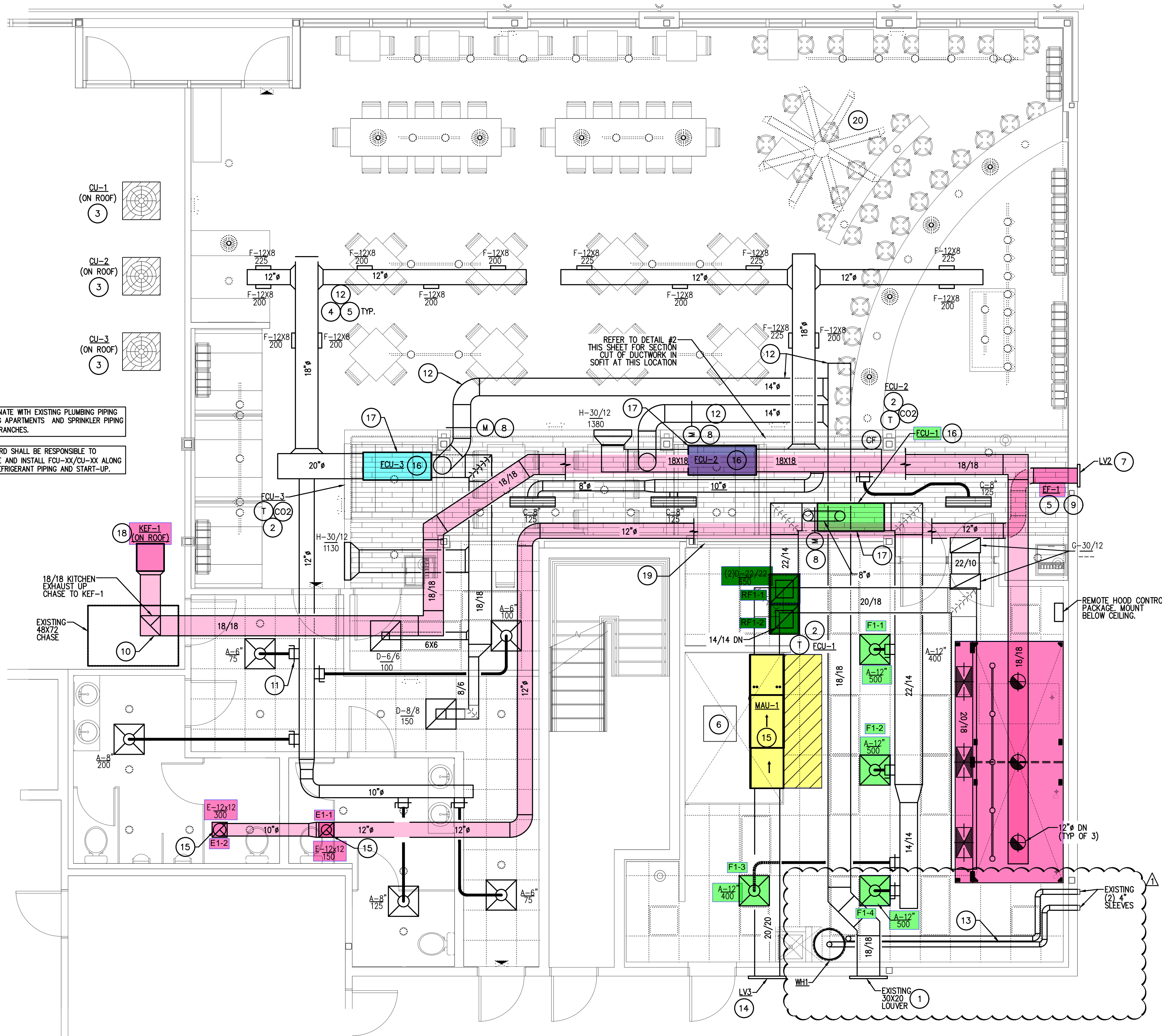
MOUNT DIFFUSERS IN EXPOSED CEILING AREAS IN A MANNER THAT AIR FLOW DOES NOT INTERFERE WITH PENDENT LIGHTING.

SUPPLY DUCT BRANCH SIZING SCHEDULE

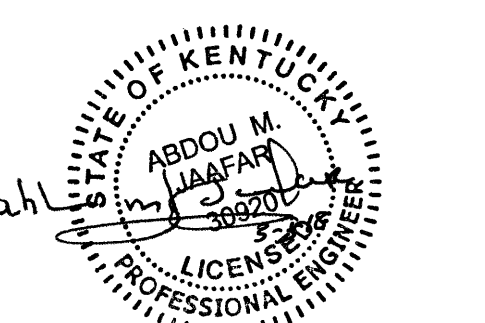
CFM	BRANCH SIZE
0-100	6"
101-200	8"
201-380	10"
381-600	12"
601-900	14"
901-1275	16"

KEY NOTES

- ROUTE DUCT TO EXISTING 30X20 LOUVER ON OUTSIDE WALL FOR TENANT INTAKE AIR CONNECTION. ROUTE DUCTWORK AS HIGH AS POSSIBLE. INSULATE WITH 2" DUCT WRAP SIMILAR TO SUPPLY DUCTWORK.
- PROVIDE HONEYWELL VISIONPRO 8000 PART NUMBER TH8321R1000, 24 VOLT, OR EQUIVALENT, 7 DAY PROGRAMMABLE THERMOSTAT WITH TIME OF DAY MOTORIZED DAMPER INTERLOCK. MOUNT TOP OF THERMOSTAT AT 48" A.F.F. COORDINATE EXACT LOCATION WITH LANDLORD REPRESENTATIVE. FCU-1 & 2 PROVIDE CO2 SENSOR ABOVE THERMOSTAT. TENANT CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL WIRING BETWEEN THERMOSTAT, FCU, MOTORIZED DAMPER AND CONDENSING UNIT ON ROOF.
- CONDENSING UNIT BY LANDLORD ON ROOF. FIELD VERIFY EXACT LOCATION. REFRIGERANT PIPING FROM CONDENSING UNIT TO FCU BY LANDLORD.
- ALL DUCTWORK TO BE ROUTED AS HIGH AS POSSIBLE. REFER TO DETAIL 2 FOR ADDITIONAL INFORMATION. COORDINATE ROUTING OF DUCTS WITH LIGHTS. COORDINATE ROUTING WITH ALL OTHER TRADES. (TYP.)
- INLINE EXHAUST FAN TO BE SUPPORTED FROM STRUCTURE. REFER TO DETAIL ON M3.0. COORDINATE PLACEMENT WITH SERVICE ACCESS FROM FACE OF SOFFIT. INSULATE DUCTWORK UP TO 10'-0" FROM LOUVER.
- REMOTE MOUNTED CONDENSING UNIT FOR COOLER. APPROXIMATE LOCATION OF COOLER CONDENSING UNIT. FIELD COORDINATE EXACT LOCATION OF THE CONDENSING UNIT WITH LOCATION OF MAU.
- RETROFIT EXISTING (2) 4" SLEEVES WITH NEW LOUVER. OR CAP IF NOT POSSIBLE TO RETROFIT WITH EF-1 LOCATION AND PROVIDE NEW PENETRATION FOR LOUVER.
- PROVIDE OUTDOOR AIR DUCT WITH 24V DC MOTORIZED DAMPER, INTERLOCK BY ELECTRICAL. INTERLOCK DAMPER WITH FCU. DAMPER OPENS TO SCHEDULED OUTDOOR AIR POSITION DURING OCCUPIED HOURS. FCU-1 & 2 MOTORIZED DAMPER TO OPEN TO MINIMUM OUTDOOR AIR SETTING. WHEN CO2 SENSOR IS ACTIVATED MOTORIZED DAMPER TO OPEN TO MAXIMUM OUTDOOR AIR SETTING. ALL MOTORIZED DAMPERS TO BE CLOSED DURING UNOCCUPIED HOURS.
- ROUTE 12" EXHAUST DUCT THRU INLINE FAN TO WALL LOUVER. EXHAUST TERMINATION SHALL BE SEPARATED BY AT LEAST 10'-0" MINIMUM FROM OUTSIDE AIR INTAKE. REFER TO M2.0 FOR LOUVER SPECIFICATIONS. FIELD VERIFY EXACT ROUTING.
- PROVIDE FIRE DAMPER WITH ACCESS PANEL AT BASE OF SHAFT.
- ROUTE DUCTWORK CONCEALED WITHIN SOFFIT. DUCTWORK SHOWN IN DINING AREA ONLY FOR CLARITY.
- ROUTE 4" VENT AND INTAKE FROM WATER HEATER TO EXISTING SLEEVES IN WALL. FIELD VERIFY EXACT ROUTING. COORDINATE FINAL TERMINATION IF CONCENTRIC VENT OR SEPARATE VENTING.
- FIELD VERIFY EXACT MOUNTING LOCATION OF LOUVER ON WALL. COORDINATE LOCATION WITH EXISTING CONDITIONS AND OWNER REPRESENTATIVE. MOUNT AS HIGH AS POSSIBLE. PROVIDE ADDITIONAL BRACING AS REQUIRED. INSULATE MAU DUCTWORK WITH 2" DUCT WRAP SIMILAR TO SUPPLY DUCTWORK.
- MAU TO BE MOUNTED ON PLATFORM ABOVE COOLER. REFER TO ARCHITECTURAL DRAWINGS FOR PLATFORM DETAILS. PROVIDE VIBRATION ISOLATION DAMPENERS BETWEEN MAU AND PLATFORM. FIELD VERIFY 30" ACCESS CLEARANCE IS MAINTAINED.
- EXISTING FCU BY LANDLORD. FIELD VERIFY 36" ACCESS CLEARANCE IS MAINTAINED FOR MAINTENANCE.
- PROVIDE ACCESS CLEARANCE THIS SIDE OF UNIT.
- KITCHEN EXHAUST FAN TO BE LOCATED ON ROOF. ROUTE 18/18 KITCHEN EXHAUST UP EXISTING CHASE TO EXHAUST FAN. OFF-SET DUCTWORK AS NEEDED. TRANSITION WITHIN ROOF CURB TO CONNECT TO EXHAUST FAN. PROVIDE FLEXIBLE DUCT CONNECTION AT CONNECTION TO UTILITY FAN. FIELD VERIFY EXACT ROUTING. COORDINATE LOCATION OF EXHAUST FAN WITH OWNER REPRESENTATIVE. OWNER STRUCTURAL ENGINEER AND FIELD CONDITIONS. MAINTAIN MINIMUM 10'-0" FROM ANY OUTDOOR AIR INTAKE.
- COORDINATE DUCTWORK ROUTING WITH BUILDING CROSS BRACING.
- PROVIDE AND INSTALL HVLS CIRCULATION FAN. COORDINATE EXACT SWITCH LOCATION WITH TENANT.



1 HVAC FLOOR PLAN
1/4"=1'-0"



This drawing is the property of ARCHITECTURAL GROUP INT'L and is not to be reproduced and is not to be reproduced or copied in whole or in part. It is only to be used for the project and site specifically identified herein and is not to be used on any other project. It is to be returned upon request. Scales as stated herein are valid on the original drawing only. Contractor shall carefully review all dimensions and conditions shown herein and at once report to the Architect any error, inconsistency or omission to the drawing.

Revisions:

Mark	Date	By	Description
	2/28/2018		
			ISSUED FOR PERMIT
	3/5/2018		
			BULLETIN #1



ALTO - DUVENECK SQUARE
COVINGTON, KENTUCKY

PROJECT # 170928
DATE ISSUED 01/23/2018

HVAC FLOOR PLAN

M1.0